

ABSTRACT
DURABLE REPELLENT FLUOROCHEMICAL COMPOSITIONS

This invention provides compositions for treating fibrous substrates to render those
5 substrates durably repellent to water and oil and durably resistant to dry soil comprising a
fluorochemical urethane formed by reacting a tri- or higher order isocyanate with a
fluorochemical monofunctional compound; and optionally a non-fluorinated aliphatic
monofunctional compound.

The present invention also provides a method of treating fibrous substrates to render
10 those substrates durably repellent to water and oil and durably resistant to dry soil comprising
application of the aforementioned composition to a fibrous substrate with optionally one or more
hydrophilic anti-staining compounds such as acrylic and methacrylic acid polymers and
copolymers, sulfonated phenol-formaldehyde resins, and styrene-maleic anhydride polymers and
15 copolymers, said application of the composition taking place either coincident with or following
application of the hydrophilic anti-staining compound or compounds to the substrate. Fibrous
substrates treated according to this method and fibrous substrates treated with the
aforementioned compositions are also disclosed.